Product Datasheet

MUC1 Antibody (Mc5) - Chimeric - BSA Free
NBP3-21451-0.2mg

Unit Size: 0.2 mg

Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.

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MUC1 Antibody (Mc5) - Chimeric - BSA Free

Product Information

Unit Size	0.2 mg
Concentration	1 mg/ml
Storage	Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.
Clonality	Monoclonal
Clone	Mc5
Preservative	0.02% Proclin 300
Isotype	IgG Kappa
Purity	Protein A purified
Buffer	PBS

Product Description

Description	This chimeric rabbit antibody was made using the variable domain sequences of the original Mouse IgG2 format, for improved compatibility with existing reagents, assays and techniques.
Host	Rabbit
Gene ID	4582
Gene Symbol	MUC1
Species	Human
Specificity/Sensitivity	This antibody is specific for the amino acid sequence DTRPAP of MUC1
Immunogen	Human breast epithelial mucin

Product Application Details

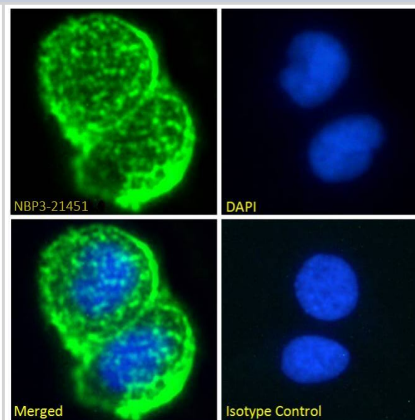|	
Applications	Western Blot, ELISA, Immunocytochemistry/ Immunofluorescence, Immunohistochemistry, Immunoprecipitation
Recommended Dilutions	Western Blot, ELISA, Immunohistochemistry, Immunocytochemistry/ Immunofluorescence, Immunoprecipitation

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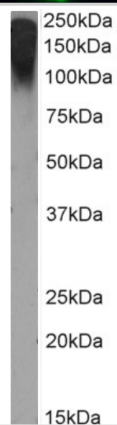technical@novusbio.com

Application Notes	In an attempt to develop a reliable way to detect breast cancer, immunoprecipitation was preformed on NPGP from HMFG using the mouse version of this antibody bound to Sepharose 4B. Furthermore, this antibody was tested in an radioimmunology experiment on NPGP using the mouse version of this antibody (Ceriani et al, 1992; pmid:1377884). The epitope of this antibody was mapped by ELISA using small peptides - the murine version of this antibody was used (Petrakou et al, 1998 ; pmid:9422085). This antibody was used to identify cells expressing the MUC1 protein. This was accomplished by using the mouse version of this antibody on cell lysates of cell transfected with the MUC1 protein in a western blot analysis (Rubinstein et al, 2006; pmid:17145869). To compare the diagnostic usefulness of different antibodies, the mouse version of this antibody was used for immunohistochemistry on cell pellets from pleural fluid specimens (Creaney et al, 2008; pmid:18454162). While developing an antibody against the alpha/beta junction of MUC1 the mouse version of this antibody was used for western blot on the MUC1 protein (Rubinstein et al, 2008; pmid:18821582). While assesing a panel of 56 anti MUC1 antibodies for their ability to detect cancer the mouse version of this antibody was used for an immunoradiometric assay on a serum made from sera from 10 different patients with breast, ovarian or colon cancer (Norum et al, 1998; pmid:9422099). To more accurately determine the epitope of this antibody, an ELISA was preformed using the murine version of this antibody on different small pepetides from the MUC1 protein (Karsten et al, 2004; pmid:15115750).

Images

Immunocytochemistry/ Immunofluorescence: Rabbit MUC1 mAb (Mc5) - Chimeric [NBP3-21451] - Immunofluorescence analysis of paraformaldehyde fixed MCF7 cells permeabilized with 0.15% Triton and stained with the chimeric mouse IgG1 version of Mc5 at 10 ug/ml for1h followed by Alexa Fluor® 488 secondary antibody (2 ug/ml), showing membrane staining. The nuclear stain is DAPI (blue). Panels show from left-right, top-bottom DAPI, merged channels and an isotype control. The isotype control was stained with an anti-unknown specificity antibody followed by Alexa Fluor® 488 secondary antibody.

Western Blot: Rabbit MUC1 mAb (Mc5) - Chimeric [NBP3-21451] - MCF7 cell lysate (35µg protein in RIPA buffer) was resolved on a 10% SDS PAGE gel and blots probed with the chimeric rabbit IgG version of Mc5 at 2 µg/ml before detection using an anti-rabbit secondary antibody. A primary incubation of 1h was used and protein was detected by chemiluminescence. The expected running size for unmodified breast epithelial mucin is 122.1kDa, but this protein is heavily glycosylated and lipidated at several positions leading to the observed running size.

Products Related to NBP3-21451-0.2mg

NBP2-33376H	Blue Marker Antibody (6F4-F6) [HRP]
HAF008	Goat anti-Rabbit IgG Secondary Antibody [HRP]
NB7160	Goat anti-Rabbit IgG (H+L) Secondary Antibody [HRP]
H00004582-Q01-10ug	Recombinant Human MUC1 GST (N-Term) Protein

Limitations

This product is for research use only and is not approved for use in humans or in clinical diagnosis. Primary Antibodies are guaranteed for 1 year from date of receipt.

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